



[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2014-0034; Directorate Identifier 2013-SW-006-AD;

Amendment 39-17948; AD 2014-16-24]

RIN 2120-AA64

Airworthiness Directives; Airbus Helicopters Deutschland GmbH (Previously Eurocopter Deutschland GmbH) (Airbus Helicopters) Helicopters

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: We are superseding Airworthiness Directive (AD) 2012-10-53 for Eurocopter Deutschland GmbH (ECD) (now Airbus Helicopters) Model EC135P1, EC135P2, EC135P2+, EC135T1, EC135T2, and EC135T2+ helicopters. AD 2012-10-53 required, before further flight and at specified intervals, checking and inspecting the upper and lower main rotor hub (MRH) shaft flanges for a crack, and inspecting the lower hub-shaft flange bolt attachment areas for a crack. Since we issued AD 2012-10-53, it has been determined that it is safe to increase the visual inspection intervals of the MRH shaft flanges from 10 hours time-in-service (TIS) to 50 hours TIS and remove the inspection of the lower MRH shaft flange bolt attachment areas. This new AD continues to require checking and inspecting the upper and lower MRH shaft flanges for a crack. These actions are intended to detect a crack on the MRH shaft flange, which if not

corrected, could result in failure of the MRH and subsequent loss of control of the helicopter.

DATES: This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in this AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: For service information identified in this AD, contact Airbus Helicopters, Inc., 2701 N. Forum Drive, Grand Prairie, Texas 75052; telephone (972) 641-0000 or (800) 232-0323; fax (972) 641-3775; or at <http://www.airbushelicopters.com/techpub>. You may view this referenced service information at the FAA, Office of the Regional Counsel, Southwest Region, 2601 Meacham Blvd., Room 663, Fort Worth, Texas 76137.

Examining the AD Docket

You may examine the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2014-0034; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this AD, the European Aviation Safety Agency (EASA) AD, any incorporated-by-reference information, the economic evaluation, any comments received, and other information. The address for the Docket Office (phone: 800-647-5527) is Document Management Facility, U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.

FOR FURTHER INFORMATION CONTACT: Gary Roach, Aviation Safety Engineer, Regulations and Policy Group, Rotorcraft Directorate, FAA, 2601 Meacham Blvd., Fort Worth, Texas 76137; telephone (817) 222-5110; email gary.b.roach@faa.gov.

SUPPLEMENTARY INFORMATION:

Discussion

On May 18, 2012, we issued Emergency AD 2012-10-53, which superseded Emergency AD 2012-10-51. Emergency AD 2012-10-53 was published in the Federal Register as a Final rule; request for comments on November 20, 2012, at 77 FR 69558. AD 2012-10-53 required a repetitive pilot check of the lower MRH shaft flange for a crack, a repetitive inspection of the upper and lower MRH shaft flanges and bolt attachment areas for a crack, and replacing the MRH shaft if there is a crack. AD 2012-10-53 was prompted by three reported incidents of cracking on the lower hub-shaft flanges of EC135 model helicopters.

After we issued AD 2012-10-53, Eurocopter revised Alert Service Bulletin (ASB) No. EC135-62A-029, now at Revision 7, dated October 22, 2012, which contains the procedures for the repetitive pilot checks and inspections. The inspection interval for the visual inspection of the MRH shaft flanges was increased to 50 flight hours based on results from full scale component testing. The note regarding the preflight check states that the time between two preflight checks must not exceed 6 flight hours, and clarifies that one flight may comprise of multiple take-offs and landings and a flight starts when the helicopter takes off and ends when the helicopter is on the ground with the engines shut off. Eurocopter also removed the visual inspection of the blade bolt attachment areas from the ASB.

EASA also revised its AD, now at EASA AD 2012-0085R5, dated October 30, 2012, to correct this unsafe condition. EASA advises that based on results of the further full scale component testing, it has been determined that the interval for the repetitive visual inspections of the upper and lower hub shaft flanges can be extended to 50 flight hours. EASA AD No. 2012-0085R5 also references ECD ASB No. EC135-62A-029, Revision 7, dated October 22, 2012, for related information. EASA considers AD 2012-0085R5 to be interim AD action and further AD action may follow.

On January 16, 2014, we issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 to supersede AD 2012-10-53. The NPRM published in the Federal Register on January 31, 2014 (79 FR 5325). The NPRM proposed to continue to require the repetitive visual pilot check and inspection of the upper and lower MRH shaft flanges, as well as the replacement requirements of AD 2012-10-53. An owner/operator (pilot) may perform the required visual check and must enter compliance with the applicable paragraph of the AD into the helicopter maintenance records in accordance with 14 CFR §§ 43.9(a)(1) through (4) and 91.417(a)(2)(v). A pilot may perform this check because it involves only looking at the visible area of the MRH shaft flanges and can be performed equally well by a pilot or a mechanic. This check is an exception to our standard maintenance regulations. Further, the NPRM proposed to increase the repetitive visual inspection interval for MRH shafts with 400 hours or more TIS from 10 hours TIS to 50 hours TIS. Any alternative method of compliance (AMOC) previously approved in accordance with AD 2012-10-53 would continue to be considered approved as an AMOC for the corresponding requirements in this AD.

Since we issued the NPRM, Eurocopter Deutschland GmbH changed its name to

Airbus Helicopters Deutschland GmbH. This AD reflects that change and updates the contact information to obtain service documentation.

Comments

We gave the public the opportunity to participate in developing this AD, but we did not receive any comments on the NPRM (79 FR 5325, January 31, 2014).

FAA's Determination

These helicopters have been approved by the aviation authority of Germany and are approved for operation in the United States. Pursuant to our bilateral agreement with Germany, EASA, its technical representative, has notified us of the unsafe condition described in the EASA ADs. We are issuing this AD because we evaluated all information provided by EASA and determined the unsafe condition exists and is likely to exist or develop on other helicopters of these same type designs and that air safety and the public interest require adopting the AD requirements as proposed except for the name change previously described and a minor editorial change to meet current publishing requirements. The reference to "the applicability of this AD" in paragraph (f)(3) of this AD has been changed to reference "paragraph (a) of this AD." These changes are consistent with the intent of the proposals in the NPRM (79 FR 5325, January 31, 2014) and will not increase the economic burden on any operator.

Differences Between this AD and the EASA AD

EASA considers its AD action to be an interim action; we do not consider this AD to be an interim AD action because the requirements for the applicable part-numbered MRH shafts are not expected to change. The EASA AD requires you to report the findings and send the removed MRH to ECD (now Airbus Helicopters), while this AD

does not. The EASA AD requires the initial visual check within 3 days, while this AD requires the initial visual check before further flight. The EASA AD does not specify affected MRH shaft part numbers; this AD does because the FAA anticipates Airbus Helicopters will produce new part-numbered MRH shafts without the same unsafe condition.

Related Service Information

We reviewed Eurocopter ASB No. EC135-62A-029, Revision 7, dated October 22, 2012, which describes procedures for preflight checking the visible area of the upper and lower MRH shaft flanges and performing a repetitive visual inspection of the upper and lower MRH shaft for cracks. EASA classified this ASB as mandatory and issued AD No. 2012-0085R5 to ensure the continued airworthiness of these helicopters.

Costs of Compliance

We estimate that this AD affects 244 helicopters of U.S. Registry. We estimate inspecting the MRH shaft flanges requires 2.5 work-hours at an average labor rate of \$85 per work-hour, for a total cost per helicopter of \$212 and a total cost to U.S. operators of \$51,728 per inspection cycle. Replacing an MRH shaft requires about 8 work-hours and required parts cost \$55,715, for a total cost per helicopter of \$56,395.

Authority for this Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, Section 106, describes the authority of the FAA Administrator. Subtitle VII, Aviation Programs, describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701, “General requirements.” Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

We have determined that this AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

- (1) Is not a “significant regulatory action” under Executive Order 12866,
- (2) Is not a “significant rule” under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979),
- (3) Will not affect intrastate aviation in Alaska to the extent that it justifies making a regulatory distinction, and
- (4) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by removing Airworthiness Directive (AD) 2012-10-53 (77 FR 69558, November 20, 2012), and adding the following new AD:

2014-16-24 Airbus Helicopters Deutschland GmbH (Previously Eurocopter Deutschland GmbH) Helicopters: Amendment 39-17948; Docket No. FAA-2014-0034; Directorate Identifier 2013-SW-006-AD.

(a) Applicability

This AD applies to Model EC135P1, EC135P2, EC135P2+, EC135T1, EC135T2, and EC135T2+ helicopters, with a main rotor hub (MRH) shaft, part number (P/N) L623M1006101, L623M1206101, L623M1006102, L623M1206102, L623M1006103, or L623M1206103 installed, certificated in any category.

(b) Unsafe Condition

This AD defines the unsafe condition as a crack in the MRH shaft flange, which could result in failure of the MRH and subsequent loss of control of the helicopter.

(c) Affected ADs

This AD supersedes AD 2012-10-53, Amendment 39-17254 (77 FR 69558, November 20, 2012).

(d) Effective Date

This AD becomes effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(e) Compliance

You are responsible for performing each action required by this AD within the specified compliance time unless it has already been accomplished prior to that time.

(f) Required Actions

(1) Before further flight, and thereafter at intervals not to exceed 6 hours time-in-service (TIS), check the MRH shaft lower flange and the visible area of the MRH shaft upper flange for a crack. Figures 1 and 2 to Paragraph (f)(1) of this AD are examples of cracks that have been discovered in the MRH shaft lower flange. The actions required by this paragraph may be performed by the owner/operator (pilot) holding at least a private pilot certificate, and must be entered into the aircraft records showing compliance with this AD in accordance with 14 CFR §§ 43.9 (a)(1) through (4) and 14 CFR § 91.417(a)(2)(v). The record must be maintained as required by 14 CFR §§ 91.417, 121.380, or 135.439.

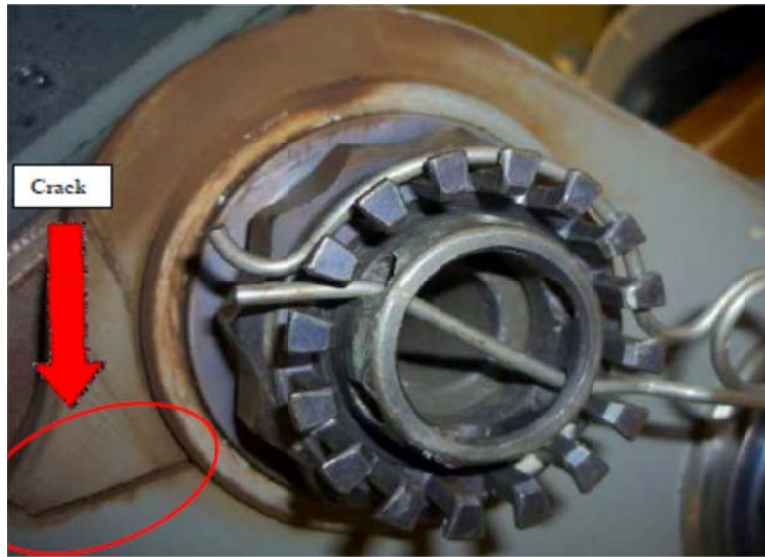


Figure 1 to Paragraph (f)(1)

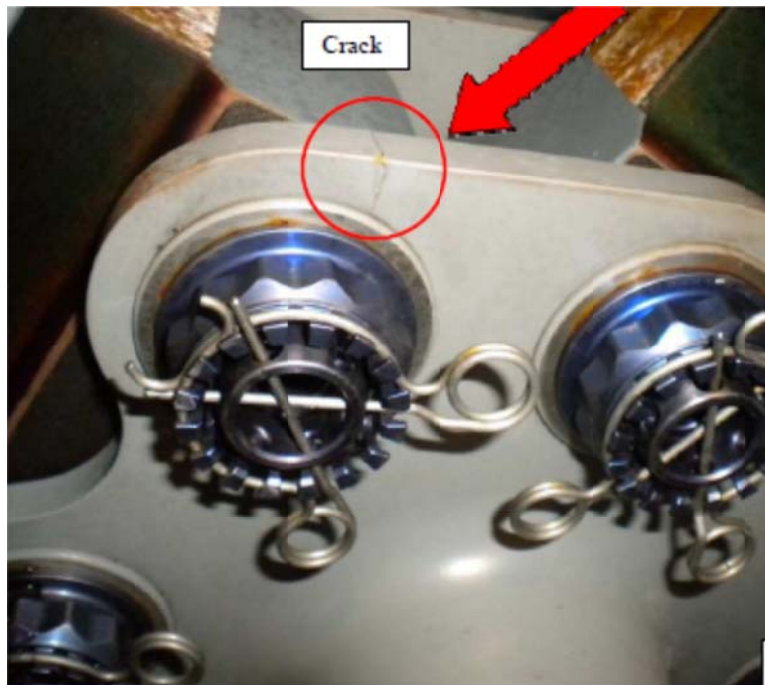


Figure 2 to Paragraph (f)(1)

(2) For MRH shafts with 400 or more hours TIS, within 50 hours TIS, and thereafter at intervals not to exceed 50 hours TIS:

(i) Remove the rotor-hub cap.

(ii) Clean the upper and lower MRH shaft flange as depicted in Figure 2 of Eurocopter Alert Service Bulletin No. EC135-62A-029, Revision 7, dated October 22, 2012, and visually inspect for a crack.

(3) If there is a crack in the upper or lower MRH shaft flange, before further flight, replace that MRH shaft with an airworthy MRH shaft. Replacing the MRH shaft with an MRH shaft having a P/N listed in paragraph (a) of this AD does not constitute terminating action for the requirements of this AD.

(g) Alternative Methods of Compliance (AMOCs)

(1) The Manager, Safety Management Group, FAA, may approve AMOCs for this AD. Send your proposal to: Gary Roach, Aviation Safety Engineer, Regulations and Policy Group, Rotorcraft Directorate, FAA, 2601 Meacham Blvd., Fort Worth, Texas 76137; telephone (817) 222-5110; email gary.b.roach@faa.gov.

(2) For operations conducted under a 14 CFR part 119 operating certificate or under 14 CFR part 91, subpart K, we suggest that you notify your principal inspector, or lacking a principal inspector, the manager of the local flight standards district office or certificate holding district office, before operating any aircraft complying with this AD through an AMOC.

(3) Any AMOC approved previously in accordance with AD No. 2012-10-53, Amendment 39-17254 (77 FR 69558, November 20, 2012), is approved as an AMOC for the corresponding requirements in paragraph (f) of this AD.

(h) Additional Information

The subject of this AD is addressed in European Aviation Safety Agency (EASA) AD No. 2012-0085R5, dated October 30, 2012. You may view the EASA AD on the Internet at <http://www.regulations.gov> in Docket No. FAA-2014-0034.

(i) Subject

Joint Aircraft Service Component (JASC) Code: 6220, Main Rotor Head.

(j) Material Incorporated by Reference

(1) The Director of the Federal Register approved the incorporation by reference (IBR) of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this service information as applicable to do the actions required by this AD, unless the AD specifies otherwise.

(i) Eurocopter Alert Service Bulletin No. EC135-62A-029, Revision 7, dated October 22, 2012, excluding Figure 1.

(ii) Reserved.

(3) For Eurocopter service information identified in this AD, contact Airbus Helicopters, Inc., 2701 N. Forum Drive, Grand Prairie, Texas 75052; telephone (972) 641-0000 or (800) 232-0323; fax (972) 641-3775; or at <http://www.airbushelicopters.com/techpub>.

(4) You may view this service information at FAA, Office of the Regional Counsel, Southwest Region, 2601 Meacham Blvd., Room 663, Fort Worth, Texas 76137. For information on the availability of this material at the FAA, call (817) 222-5110.

(5) You may view this service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call (202) 741-6030, or go to:

<http://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued in Fort Worth, Texas, on August 8, 2014.

Lance T. Gant,

Acting Directorate Manager, Rotorcraft Directorate,
Aircraft Certification Service.

[FR Doc. 2014-19525 Filed 08/20/2014 at 8:45 am; Publication Date: 08/21/2014]